

IN THE CLAIMS:

1. (Presently amended) A veneer made from a reaction mixture comprising:

a) an isocyanate,

b) a mixture (b1) of isocyanate-reactive compounds comprising:

b11) from 15 to 90% by weight, based on the weight of the mixture (b1), of a first polyether polyalcohol, said first polyether polyalcohol comprising a hydroxyl functional initiator and propylene oxide, having a number average molecular weight of from 400 to 6000 and a mean functionality of from 1.5 to 3;

b12) from a positive amount to 20% by weight, based on the weight of the mixture (b1), of a second polyether polyalcohol, said second polyether polyalcohol comprising an amine functional initiator and propylene oxide, having a number average molecular weight of from 400 to 6000 and a mean functionality of from 1.5 to 3;

b13) from 0 to 35% by weight, based on the weight of the mixture (b1), of a third polyether polyalcohol having a number average molecular weight of from 150 to 7000 and a mean functionality of from 2.1 to 5;

b14) from a positive amount to 30% by weight, based on the weight of the mixture (b1), of a bifunctional chain extender; and, optionally,

c) catalysts and/or;

d) auxiliaries and/or additives;

wherein said chain extender, said first, said second and said third polyether polyalcohols are mutually exclusive of and structurally distinct from each other, and wherein the percentages by weight of components b11, b12, b14, and b13, if present, total 100% of b1.

2. (Original) A process for producing compact veneers, which comprises reacting a reaction mixture as claimed in claim 1 in a mold.

3. (Previously Withdrawn)

4. (Previously Withdrawn)

5. (Previously Cancelled)

6. (Previously Cancelled)

7. (Previously Added) A veneer as recited in Claim 1, wherein said first polyether polyalcohol has a number average molecular weight of from 1000 to 4000.

8. (Previously Added) A veneer as recited in Claim 1, wherein said mixture (b1) comprises from 50 to 80% by weight of said first polyether polyalcohol.

9. (Previously Added) A veneer as recited in Claim 1, wherein said second polyether polyalcohol has a number average molecular weight of from 400 to 4000.

10. (Currently Amended) A veneer as recited in Claim 1, wherein said mixture (b1) comprises from 5% ~~a positive amount~~ to 10% by weight of said second polyether polyalcohol.

11. (Previously Added) A veneer as recited in Claim 1, wherein said third polyether polyalcohol has a mean functionality of from 3.1 to 5.

12. (Previously Added) A veneer as recited in Claim 1, wherein said mixture (b1) comprises from 2 to 15% by weight of said third polyether polyalcohol.

13. (Previously Added) A veneer as recited in Claim 1, wherein said mixture (b1) comprises from 10 to 25% by weight of said bifunctional chain extender.

14. (Previously Added) A veneer as recited in Claim 1, wherein said first polyether polyalcohol further comprises ethylene oxide.

15. (Previously Added) A veneer as recited in Claim 1, wherein said second polyether polyalcohol further comprises ethylene oxide.

16. (Previously Added) A veneer as recited in Claim 1, wherein said third polyether polyalcohol further comprises ethylene oxide.

REMARKS

Claims 1-4 and 7-16 remain in the application with Claim 1 being independent. Claims 3 and 4 were previously withdrawn from consideration. By the present amendment claims 1 and 10 have been amended. Support for these amendments is found on page 1, lines 42-43 and example 3. In example 3 the isocyanate is initially reacted with component b11 and then combined 1:1 with a mixture totaling 71.5% by weight component b13, 10% by weight component b12, 18% by weight component b14, and 0.5% by weight catalyst component. Thus, the amount of b12 in the mixture b1 of isocyanate-reactive components is 5% by weight.

The Examiner rejected claims 1,2 and 7-16 under 35 U.S.C. § 112, first paragraph as indefinite because the Examiner was unclear as to how the language "structurally distinct" should be interpreted. The Examiner stated "It is unclear what level of distinctness is conveyed by the language; for example, does the language pertain only to the exclusion of identical compounds or constituents?"

As Applicants have stated in the past, the language was intended to convey that no single component can function as, for example, b11 and b14. Throughout the specification each of these components is discussed separately and it is clear that each is a separate specific component. Thus, although the functionalities and molecular weight ranges have overlapping portions the claim clearly delineates that at least components b11, b12, and b14 need to be present. It is clear from the claim language that b11 is structurally distinct from b12 as one is a hydroxyl functional initiated polyether and the other is an amine functional initiated polyether. Also, some of the components falling within the limitations for b13 would have higher functionality and molecular weight than either components b11 or b12. In addition, component

H&H 65,205-097

Serial No. 09/439,435

b14 is limited to a bifunctional component whereas the other components can range from 1.5 to 5 functional. The language should be interpreted to mean that the distinctness only requires that the compounds or components not be identical and that minimally b11, b12, and b14 must be present in b1. In addition, the claim language now makes it clear that the b1 isocyanate-reactive mixture contains only b11, b12, b14, and optionally b13 and that their percentages by weight based on the weight of b1 total 100%, thus it is not open to the inclusion of other components. Thus, the rejection under 35 U.S.C. §112, first paragraph is believed to be overcome and should be withdrawn.

The Examiner also rejected claims 1, 2, 7-11, and 13-16 under 35 U.S.C. § 103(a) as being unpatentable over Schwindt et al. ('423) or Grogler et al. ('497).

Presently, independent Claim 1 is directed toward a veneer made from a reaction mixture comprising an isocyanate and a specific mixture of isocyanate-reactive compounds. The mixture of isocyanate-reactive compounds contains from 15 to 90% by weight of a first polyether polyalcohol that is hydroxyl functional initiated, contains propylene oxide, has a number average molecular weight of from 400 to 6,000, and a mean functionality of from 1.5 to 3. The isocyanate-reactive mixture further contains a positive amount to 20% by weight of a second polyether polyalcohol that is an amine functional initiated polyalcohol containing propylene oxide, has a number average molecular weight of from 400 to 6,000, and a mean functionality of from 1.5 to 3. Finally, the isocyanate-reactive mixture contains a positive amount to 30% by weight of a bifunctional chain extender. The isocyanate-reactive mixture can optionally contain up to 35% by weight of a third polyether polyalcohol having a number average molecular weight of from 150 to 7000 and a mean functionality of from 2.1 to 5. The

total percentages by weight of these components in the isocyanate-reactive mixture must be 100%, thus excluding other components.

Rejection of a claim under 35 U.S.C. § 103(a) based on a single reference requires that the single reference itself provide the motivation, teaching, or suggestion that would lead one of ordinary skill in the art to modify the cited reference in an obvious manner to produce the rejected claim. When a rejection under 35 U.S.C. § 103(a) is based on a combination of references it is essential that the Examiner point to specific teaching, suggestion, or motivation found within the references themselves that would lead one of ordinary skill in the art to combine the references and through that combination to make obvious Applicants' invention. *In re Sang-Su Lee*, 277 Fed.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002).

In the present case the Examiner has failed to present any evidence of a suggestion, teaching, or motivation found in either reference for either combining the references or for modifying the references either taken alone or in combination to produce Applicants claimed invention. The Examiner admits as he must that the references fail to disclose any use of an amine-initiated polyether polyol as required by the present claims.

The Examiner, however, takes the position that the claimed positive amount of the amine initiated polyether polyol is close enough to 0 that one would have reasonably expected the respective compositions to have the same properties at the low end of the second polyether polyol range and cites as support for this *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985).

Applicants submit that the Examiner is mistaken regarding the obviousness of the rejected claims based on either of the cited references alone or in combination and has incorrectly applied the teachings of *Titanium Metals Corp. of America v. Banner*.

Schwindt, et al discloses the formation of a polyurethane elastomer by reacting from 90 to 50% by weight of a first compound (A) having a molecular weight of from 400 to 10,000 and at least two isocyanate-reactive hydrogen atoms with an isocyanate. The reference furthermore discloses use of from 0 to 20% by weight of a chain-lengthening agent having a molecular weight of from 60 to 400. The novelty in *Schwindt, et al* is the utilization of a new catalyst combination of an alkali metal hydroxyl and/or alkaline earth metal hydroxide with an organometallic compound selected from a specific grouping. The *Schwindt, et al* reference states in Column 4, Lines 3-22, that the component (A) comprising from 90 to 50% by weight of the mixture can be either a polyester, a polyether, a polythioethers, or a polycarbonate. There is no teaching in *Schwindt, et al* of the utilization of an isocyanate-reactive mixture comprising 15 to 90% of a hydroxyl-initiated polyether alcohol with an amine-initiated polyether alcohol, and a bifunctional chain extender as required by Claim 1 of the present invention. There is no motivation, suggestion, or teaching in *Schwindt, et al* that would lead one of ordinary skill in the art to modify the isocyanate-reactive portion of the elastomer disclosed in *Schwindt, et al* to encompass that required by Claim 1 of the present invention. A comparison of the properties reported for the examples of *Schwindt, et al* to those reported in Example 3 of the present invention reveal that inclusion of the amine-initiated polyether at only 5% by weight has a dramatic effect on the properties and that the properties of Shore hardness A, tensile strength, and tear propagation are nowhere near those of the examples disclosed in *Schwindt, et al*.

H&H 65,205-097

Serial No. 09/439,435

Grogler, et al is even further from the present invention. *Grogler, et al* is directed amine-terminated polyoxy alkylene polyether that is a liquid and has a molecular weight of from 400 to 10,000 with a solid hydroxyl and/or amine-terminated polyester having a molecular weight of 400 to 20,000 wherein the solid polyester is thoroughly distributed throughout the mixture but not homogeneously miscible with the polyether. *Grogler, et al* further discloses that chain-extending agents are an optional component. *Grogler, et al* teaches a method for forming a polyether-polyester polyurethane which is unlike that of the present invention. *Grogler, et al* is specifically directed toward solving the difficulty of producing polyurethane that has a combination of polyesters and polyethers. There is no disclosure in *Grogler, et al* of the utilization of a hydroxyl-initiated first polyether with an amine-initiated second polyether and a bifunctional chain extender as required by Claim 1 of the present invention. *Grogler, et al* provides no teaching, suggestion or motivation that would lead one of ordinary skill in the art to modify *Grogler, et al* to include the components found in Claim 1 of the present invention that are not disclosed whatsoever in *Grogler, et al*. and to also exclude the solid, hydroxyl and/or amine-terminated polyester having a molecular weight of 400 to 20,000 wherein the solid polyester is thoroughly distributed throughout the mixture but not homogeneously miscible with the polyether.

The Examiner also fails to provide any evidence from either reference that would lead one of ordinary skill in the art to completely ignore the teachings of the references and to make the extensive modifications to their teachings required to produce Applicant's claimed invention. Claim 1 now excludes isocyanate-reactive components from b1 other than those cited. Thus, to

maintain the rejection under 35 U.S.C. § 103(a) the Examiner must explain by providing

H&H 65,205-097

Serial No. 09/439,435

evidence from the references where there is a teaching suggestion or motivation that would lead one of ordinary skill in the art to modify the references to produce Applicants claimed invention.

The Examiner's reliance on *Titanium Metals Corp. of America v. Banner* is misplaced. *Titanium Metals Corp. of America v. Banner* was a situation wherein the prior art reference included all of the components recited within the rejected claim and furthermore disclosed several points falling directly within the cited ranges in the rejected claim. That is not the case in the present invention wherein neither of the cited references include several of the components required by Claim 1 of the present invention. *Titanium Metals Corp. of America v. Banner* is simply not applicable to the present situation.

Applicant's attorney respectfully submits that the claims as amended are now in condition for allowance and respectfully requests such allowance.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS

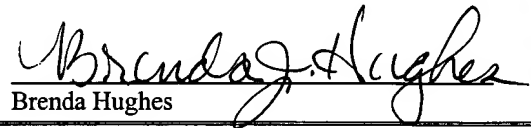
October 9, 2003
Date



Randall L. Shoemaker, Registration No. 43,118
Howard and Howard Attorneys, P.C.
The Pinehurst Office Center, Suite 101
39400 Woodward Ave.
Bloomfield Hills, MI 48304-5151
(248) 723-0425

CERTIFICATE OF MAILING

I hereby certify that this paper or fee is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed, to Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on **October 9, 2003**.


Brenda Hughes

G:\B\BASF\Patents\Up00097\Patent\Amendment04.doc